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10/566,953

01/31/2006

Claes Gustafsson

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20583

7590

12/07/2010

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EXAMINER

ZHOU, SHUBO

ART UNIT

PAPER NUMBER

1631

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/566,953 | <b>Applicant(s)</b><br>GUSTAFSSON ET AL. |  |
|                              | <b>Examiner</b><br>SHUBO (Joe) ZHOU  | <b>Art Unit</b><br>1631                  |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,117-126,129,133-136,138,140,141,147,148,150-163 and 170-178 is/are pending in the application.
- 4a) Of the above claim(s) 138, 141 and 151 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,117-126,129,133-136,140,147,148,150,152-163 and 170-178 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***/Amendments/Status of the Claims***

Applicant's amendments to the claims and the specification filed 9/22/10 are acknowledged and entered.

Claims 176-178, previously withdrawn, have been rejoined for consideration as the dependencies of the claims have changed.

Claims 2-116, 127-128, 130-132, 137, 139, 142-146, 149, and 164-169 have been previously canceled.

Claims 1, 117-126, 129, 133-136, 138, 140-141, 147-148, 150-163, and 170-178 are thus pending.

Claims 138, 141, and 151 have been previously withdrawn, and remain withdrawn, from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim.

Claims 1, 117-126, 129, 133-136, 140, 147-148, 150, 152-163, and 170-178 are presently under consideration.

### ***Sequence Rules Compliance***

The paper copy and CRF of the Sequence Listing, and the statement under 37 CFR 1.821(f) filed 9/22/10 are acknowledged and accepted. The sequence rules appear to have been complied.

### ***Specification***

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The objection to the specification for the reasons set forth in the previous Office action is withdrawn in view of the amendment filed 9/22/10.

The specification is objected to because of the following including informalities:

On page 50, a period "." appears to be missing after "PAM matrix."

***Claim Rejections - 35 USC § 101***

The rejection of claims 1, 117-126, 129, 133-136, 138, 140-141, 147-148, 150-163, and 170-175 under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter set forth in the previous Office action is withdrawn in view of the amendment filed 9/22/10.

***Claim Rejections-35 USC § 112***

The following is a quotation of the **first** paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

This rejection is reiterated from the previous Office action.

Claims 1, 117-126, 129, 133-136, 138, 140-141, 147-148, 150-163, and 170-178 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a new matter rejection.

In the amendment filed 3/17/10, claim 1 and its dependent claims were amended to recite a “form” of  $Y=f(w_1x_1, w_2x_2 \dots w_ix_i)$ , where  $x_i$  is a descriptor of a substitution, a combination of substitutions, or a principal component of one or more substitutions ....” (Emphasis is added by the examine.) While it is noted that the original claim 52, now canceled, recites the same “form,” but  $x_i$  is defined therein as “a descriptor of a substitution, a combination of substitutions, or a component of one or more substitutions ....” Applicant also points to page 12 of the specification for support, but a review of the specification as a whole and page 12 in particular again only reveals that  $x_i$  is defined as “a descriptor of a substitution, a combination of substitutions, or a component of one or more substitutions ....” Thus, that  $x_i$  is defined as “a principal component” among other things, is introduced new matter.

In the response filed 9/22/10, applicant argues that “ ‘a component of one or more substitutions’ as set forth on page 12 of the specification is synonymous with the term ‘principal component.’” See page 17 of the response. This is unpersuasive because, absent a definition or statement in the specification or inherent from scientific principles, “a component of one or more substitutions” cannot be synonymous with “principal component.” There is no such definition or statement in the specification, and in the “form” specified in claim 1, it doesn’t appear to be inherent that “a component of one or more substitutions” in the form of claim 1 is synonymous with “principal component.”

Applicant also argues that section 5.1.6 beginning on page 50, line 1, of the specification makes it clear that principal components can be used in the sequence-activity relationship specified in claim 1. Also see page 17 of the response. This is also unpersuasive. A review of the entire section 5.1.6 reveals that while Eq 1 and Eq 2 are

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referred to, they are not the same equation or form as that specified in the amended claim

1. Furthermore, the section does not even discuss principal component.

### ***Conclusion***

No claim is allowed.

### **THIS ACTION IS MADE FINAL.**

Applicants are reminded of the extension of time policy as set forth in 37 C.F.R. §1.136 (a). A shortened statutory period for response to this final action is set to expire three months from the date of this action. In the event a first response is filed within two months of the mailing date of this final action and the advisory action is not mailed until after the end of the three-month shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 C.F.R. §1.136 (a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than six months from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shubo (Joe) Zhou, whose telephone number is 571-272-0724. The examiner can normally be reached Monday-Friday from 9 A.M. to 5 P.M. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marjorie Moran, can be reached on 571-272-0720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent

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Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public. For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

/Shubo (Joe) Zhou/

SHUBO (JOE) ZHOU, PH.D.

PRIMARY EXAMINER